

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	36	differential adj mobility adj spectrom\$7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:23
L2	541261	(differential adj mobility adj spectrom\$7) or "DMS"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:24
L3	17	1 and explo\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:23
L4	15216	2 and explo\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:23
L5	121400	spectrom\$7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:23
L6	18564	5 and explo\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:24
L7	3102	6 and ((radio adj frequency) or "RF")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L8	3102	7 and explo\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L9	258	(differential adj mobility adj spectrom\$7) or "FAIMS"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:24
L10	111	9 and explo\$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L11	58	10 and ((radio adj frequency) or "RF")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25

## EAST Search History

L12	18	11 and dopant	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L13	36	11 and analyte	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L14	11	11 and analyte and dopant	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L15	184	(field adj asymmetric adj waveform adj ion) or (FAIM\$1)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L16	20103	ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L17	8977	(ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L18	3045	((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L19	732	((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L20	449	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L21	109	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same (positive\$2 near2 ion) and (negative\$2 near2 ion))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L22	33174	miller.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L23	70	nagarov.in. or nazarov.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25

## EAST Search History

L24	184	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 adj ion\$2 adj mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L25	187	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L26	677	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L27	342	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L28	385	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L29	12	"6495823".URPN.	USPAT	OR	ON	2006/03/16 18:25
L30	725	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L31	206	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L32	165	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and simultaneous\$2) and ((drift adj tube) or (flow adj channel) or (flow adj path))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L33	101	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same ((positive\$2 near2 ion) and (negative\$2 near2 ion)))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25

## EAST Search History

L34	41	miller.in. and raanan	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L35	31	(nagarov.in. or nazarov.in.) and erkinjon	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L36	131	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L37	198	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L38	238	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L39	1	"6512224".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L40	11	("5420424"   "5455417"   "5536939"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5965882"   "6051832").PN.	USPAT	OR	ON	2006/03/16 18:25
L41	16	"6512224".URPN.	USPAT	OR	ON	2006/03/16 18:25
L42	1	"6495823".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L43	43	("2615135"   "2818507"   "2919348"   "3511986"   "3619605"   "3621240"   "3648046"   "4019989"   "4163151"   "4167668"   "4315153"   "4517462"   "4761545"   "4885500"   "4931640"   "5019706"   "5047723"   "5144127"   "5281494"   "5298745"   "5373157"   "5420424"   "5455417"   "5492867"   "5536939"   "5541408"   "5644131"   "5654544"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5852302"   "5965882"   "6049052"   "6051832"   "6124592"   "6157029"   "6157031"   "6188167"   "6262416").PN.	USPAT	OR	ON	2006/03/16 18:25

## EAST Search History

L44	13	(US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$). did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L45	4	((US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$). did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.) and ("RF" or (radio adj frequency))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L46	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L47	74	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and (high adj field)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L48	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L49	11	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ((alpha adj curve) or (alpha adj data) or (alpha adj parameter) or (alpha adj coefficient)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:25
L50	1	"6504149".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L51	1	"5789745".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L52	1	"6459079".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25

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L53	14	(US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6504149-\$ or US-6495823-\$ or US-6124592-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$).did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L54	448	250/286	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L55	1163	250/287	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L56	2367	250/281	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L57	2404	216/67	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L58	1425	436/173	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L59	586	706/15	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:25
L60	184	(field adj asymmetric adj waveform adj ion) or (FAIM\$1)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L61	20103	ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L62	8977	(ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L63	3045	((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L64	732	((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L65	449	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25

## EAST Search History

L66	109	(((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same (positive\$2 near2 ion) and (negative\$2 near2 ion))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L67	33174	millier.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L68	70	nagarov.in. or nazarov.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L69	184	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 adj ion\$2 adj mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:25
L70	187	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L71	677	(((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L72	342	(((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L73	385	(((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L74	12	"6495823".URPN.	USPAT	OR	ON	2006/03/16 18:26
L75	725	(((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L76	206	(((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L77	448	250/286	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26

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L78	1163	250/287	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L79	2367	250/281	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L80	2404	216/67	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L81	1425	436/173	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L82	586	706/15	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L83	1	"6512224".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L84	1	"6495823".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L85	1	"6504149".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L86	1	"5789745".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L87	1	"6459079".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L88	101	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same ((positive\$2 near2 ion) and (negative\$2 near2 ion))))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L89	41	millier.in. and raanan	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L90	31	(nagarov.in. or nazarov.in.) and erkinjon	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L91	131	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L92	11	("5420424"   "5455417"   "5536939"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5965882"   "6051832").PN.	USPAT	OR	ON	2006/03/16 18:26
L93	16	"6512224".URPN.	USPAT	OR	ON	2006/03/16 18:26



## EAST Search History

L94	43	("2615135"   "2818507"   "2919348"   "3511986"   "3619605"   "3621240"   "3648046"   "4019989"   "4163151"   "4167668"   "4315153"   "4517462"   "4761545"   "4885500"   "4931640"   "5019706"   "5047723"   "5144127"   "5281494"   "5298745"   "5373157"   "5420424"   "5455417"   "5492867"   "5536939"   "5541408"   "5644131"   "5654544"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5852302"   "5965882"   "6049052"   "6051832"   "6124592"   "6157029"   "6157031"   "6188167"   "6262416").PN.	USPAT	OR	ON	2006/03/16 18:26
L95	13	(US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$). did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L96	4	((US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$). did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.) and ("RF" or (radio adj frequency)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L97	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L98	74	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and (high adj field)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26

## EAST Search History

L99	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L100	11	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ((alpha adj curve) or (alpha adj data) or (alpha adj parameter) or (alpha adj coefficient))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L101	14	(US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6504149-\$ or US-6495823-\$ or US-6124592-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$).did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L102	165	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and simultaneous\$2) and ((drift adj tube) or (flow adj channel) or (flow adj path))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L103	198	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L104	238	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L105	341	250/291	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L106	184	(field adj asymmetric adj waveform adj ion) or (FAIM\$1)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26

## EAST Search History

L107	20103	ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L108	8977	(ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L109	3045	((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L110	732	((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L111	449	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L112	109	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same (positive\$2 near2 ion) and (negative\$2 near2 ion))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L113	33174	miller.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L114	70	nagarov.in. or nazarov.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L115	184	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 adj ion\$2 adj mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L116	187	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L117	677	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26

## EAST Search History

L118	342	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L119	385	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L120	12	"6495823".URPN.	USPAT	OR	ON	2006/03/16 18:26
L121	725	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L122	206	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L123	448	250/286	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L124	1163	250/287	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L125	2367	250/281	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L126	2404	216/67	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L127	1425	436/173	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L128	586	706/15	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L129	184	(field adj asymmetric adj waveform adj ion) or (FAIM\$1)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L130	20103	ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L131	8977	(ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L132	3045	((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26

## EAST Search History

L133	732	((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L134	449	((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L135	109	((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same (positive\$2 near2 ion) and (negative\$2 near2 ion))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L136	33174	miller.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L137	70	nagarov.in. or nazarov.in.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L138	184	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 adj ion\$2 adj mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L139	187	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L140	677	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L141	342	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L142	385	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L143	12	"6495823".URPN.	USPAT	OR	ON	2006/03/16 18:26

## EAST Search History

L144	725	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L145	206	((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L146	448	250/286	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L147	1163	250/287	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L148	2367	250/281	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L149	2404	216/67	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L150	1425	436/173	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L151	586	706/15	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L152	341	250/291	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L153	1	"6512224".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L154	1	"6495823".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L155	1	"6504149".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L156	1	"5789745".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L157	1	"6459079".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L158	1	"6512224".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L159	1	"6495823".pn.	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L160	1	"6504149".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L161	1	"5789745".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26

## EAST Search History

L162	1	"6459079".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26
L163	101	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same ((positive\$2 near2 ion) and (negative\$2 near2 ion)))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L164	41	millier.in. and raanan	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L165	31	(nagarov.in. or nazarov.in.) and erkinjon	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L166	11	("5420424"   "5455417"   "5536939"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5965882"   "6051832").PN.	USPAT	OR	ON	2006/03/16 18:26
L167	16	"6512224".URPN.	USPAT	OR	ON	2006/03/16 18:26
L168	43	("2615135"   "2818507"   "2919348"   "3511986"   "3619605"   "3621240"   "3648046"   "4019989"   "4163151"   "4167668"   "4315153"   "4517462"   "4761545"   "4885500"   "4931640"   "5019706"   "5047723"   "5144127"   "5281494"   "5298745"   "5373157"   "5420424"   "5455417"   "5492867"   "5536939"   "5541408"   "5644131"   "5654544"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5852302"   "5965882"   "6049052"   "6051832"   "6124592"   "6157029"   "6157031"   "6188167"   "6262416").PN.	USPAT	OR	ON	2006/03/16 18:26
L169	13	(US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$). did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26

## EAST Search History

L170	4	((US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$).did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.) and ("RF" or (radio adj frequency)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L171	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L172	74	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and (high adj field)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L173	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L174	11	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ((alpha adj curve) or (alpha adj data) or (alpha adj parameter) or (alpha adj coefficient)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:26
L175	14	(US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6504149-\$ or US-6495823-\$ or US-6124592-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$).did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26



## EAST Search History

L176	101	(((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion)) and (simultaneous\$2 same ((positive\$2 near2 ion) and (negative\$2 near2 ion))))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L177	41	millier.in. and raanan	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L178	31	(nagarov.in. or nazarov.in.) and erkinjon	US-PGPUB; USPAT	OR	ON	2006/03/16 18:26
L179	11	("5420424"   "5455417"   "5536939"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5965882"   "6051832").PN.	USPAT	OR	ON	2006/03/16 18:26
L180	16	"6512224".URPN.	USPAT	OR	ON	2006/03/16 18:26
L181	43	("2615135"   "2818507"   "2919348"   "3511986"   "3619605"   "3621240"   "3648046"   "4019989"   "4163151"   "4167668"   "4315153"   "4517462"   "4761545"   "4885500"   "4931640"   "5019706"   "5047723"   "5144127"   "5281494"   "5298745"   "5373157"   "5420424"   "5455417"   "5492867"   "5536939"   "5541408"   "5644131"   "5654544"   "5723861"   "5736739"   "5763876"   "5789745"   "5801379"   "5834771"   "5852302"   "5965882"   "6049052"   "6051832"   "6124592"   "6157029"   "6157031"   "6188167"   "6262416").PN.	USPAT	OR	ON	2006/03/16 18:26
L182	13	(US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$). did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:26

## EAST Search History

L183	4	((US-6495823-\$ or US-6124592-\$ or US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$).did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.) and ("RF" or (radio adj frequency)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:27
L184	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:27
L185	74	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and (high adj field)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:27
L186	55	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ("RF" or (radio adj frequency)))) and alpha	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:27
L187	11	(((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and ((alpha adj curve) or (alpha adj data) or (alpha adj parameter) or (alpha adj coefficient)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:27
L188	14	(US-5789745-\$ or US-5455417-\$ or US-6512224-\$ or US-6504149-\$ or US-6495823-\$ or US-6124592-\$ or US-6509562-\$ or US-6239428-\$ or US-6107624-\$).did. or (US-20030057369-\$ or US-20030057367-\$ or US-20030038235-\$ or US-20030047681-\$ or US-20030020012-\$).did.	US-PGPUB; USPAT	OR	OFF	2006/03/16 18:27

## EAST Search History

L189	165	((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion) and simultaneous\$2) and ((drift adj tube) or (flow adj channel) or (flow adj path))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27
L190	131	(((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27
L191	198	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27
L192	131	(((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27
L193	165	((((ion and gas and analyz\$3 and detect\$3 and positive\$2 and negative\$2) and spectromet\$2) and electrode) and (positive\$2 near2 ion) and (negative\$2 near2 ion) and simultaneous\$2) and ((drift adj tube) or (flow adj channel) or (flow adj path))	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27
L194	198	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectrometer)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27
L195	238	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27
L196	238	((((field adj asymmetric adj waveform adj ion) or (FAIM\$1)) or (waveform\$3 near2 ion\$2 near2 mobility)) or (ion adj mobility adj spectromet\$2)) and simultaneous\$2) and electrode	US-PGPUB; USPAT	OR	ON	2006/03/16 18:27

## EAST Search History

L197	2590	250/288	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 18:35
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